



AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

In order to better conform to recent guidelines regarding the claiming of priority benefits, please replace the paragraph immediately following the title with the following paragraph. Note that the only difference between the priority claims here and the previously entered priority claims is that the priority claims here are provided in a single sentence.

—The present patent application claims the benefit of U.S. Provisional Application No. 60/062,931, filed October 21, 1997; the present application also is: (a) a continuation-in-part of co-pending U.S. Application No. 09/194,367 filed November 24, 1998, which claims the benefit of International Application No. PCT/US97/15892 filed September 8, 1997, and (b) a continuation-in-part of International Application No. PCT/US97/15892 filed September 8, 1997; both (a) and (b) claim the benefit of the following U.S. Provisional Applications: U.S. Provisional Application No. 60/056,590 filed August 20, 1997; U.S. Provisional Application No. 60/044,821 filed April 25, 1997; and U.S. Provisional Application 60/025,855 filed September 9, 1996. Accordingly, the benefit of each of the above applications are hereby claimed, and each of the above applications are herein fully incorporated by reference.--

Please replace the paragraph at page 102, lines 5-10 with the following:

receives and routes external information as necessary. For instance, this subsystem may receive (via, e.g., the public telephone switching network and Internet 1362) such environmental information as increased signal noise in a particular service area due to increase traffic, a change in weather conditions, a base station 122 (or other infrastructure provisioning), change in operation status (e.g., operational to inactive);

Please replace the paragraph beginning on page 79, line 1 and ending on page 80, line 10 with the following:

(28.3) The present invention provides the capability to activate serially one or more groups of one or more models 1224, wherein each model may generate a location estimate for locating the same target MS 140. Thus, for example, if a first group of models do not yield an appropriate location estimate (e.g., having a sufficiently high confidence value), then another group of models may be activated. Accordingly, a first group may include a model based on global positioning satellite (GPS) technology, whereas a second group may include base station triangulation models and pattern recognition models. Thus, for a target MS 140 having the capability to receive GPS signals, if measurements of such signals can be received from the MS, then in many situations a location estimate derived therefrom will be sufficient for locating the MS for such applications as the present invention is intended (e.g., E-911, auto tracking, selective wireless advertising based on location, railroad box car tracking, tracking of trucks between cities or states, penal restrictions on the location areas to which an individual has access). However, if such GPS signals are not available, due to environmental conditions and/or due to the target MS 140 not having the electronics for receiving GPS signals, then a second group of models may be activated. This capability for serially activating groups of models may be embodied using a data driven approach wherein the location center control subsystem 1350 activates, e.g., all models that are capable of being activated from the types of wireless measurement data received from a target MS 140 according to a particular priority. Thus, assuming GPS data is received, possibly along with additional signal time delay measurements, then a GPS location estimating model may be invoked as a first level of location processing. Thus, if each confidence value for the (one or more) GPS model generated location hypotheses have a

sufficiently high probability (and substantially overlap if more than one), then no further processing may be required, thereby conserving computational resources of the location center 142. However, in the case that such confidence values are not sufficient (or that the estimates do not substantially overlap), then an additional second group of models 1224 may be activated that are based on other computational techniques for obtaining estimates of the target MS 140. Thus, the second group may include the models 1224 that perform various forms of pattern recognition. Additionally, if the combination of the first and second groups do not provide an estimate of sufficiently high confidence, then a third group of, e.g., triangulation based models 1224 may be invoked.